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Zodiacal Light was again visible, and decidedly more brilliant than before; its light was certainly brighter than the Milky Way, especially near the axis and just above the horizon, but gradually faded off at the borders. The boundaries were well defined, chiefly the upper one. A line drawn from about 5° north of *δ Arietis* and through *γ Arietis*, passing within 2° north of η and within 4° north of *ε Piscium*, will indicate the northern edge; as to the southern one, it will be pointed out by a line drawn from about *δ Arietis*, passing between λ and μ and very near to *ν Ceti*, and downward involving still *α Piscium*. The extent of the base was about 20°; as to the axis, it was *not* coincident with the ecliptic, but rather inclined to it, according to my best estimation, about 15°.

My place of observation was unexceptionably favourable and appropriate for the purpose, or else I should not have been able to trace the outlines and observe other details of the phenomenon before me. I stood just out and to the west of the small town of Morges, on the top of a rising ground looking at a horizon formed of Mount Jura. Every possible intervening gas-light was excluded from that secluded and favoured spot.

Yet I must acknowledge that, however interesting and admirably visible the Zodiacal Light appeared to me, its display was not quite so grand and wonderfully well defined as what I saw at Clapham, in Surrey, on the memorable morning of the 14th November, 1866.

The same phenomenon occurred again, and was observed on March 5th, at $7^h\ 25^m$ P.M., and on the 7th, at $7^h\ 30^m$ P.M., with pretty near the same results and features. On the last occasion it was remarkably bright, blunted at the apex, and reaching nearly up to the *Pleiades*, quite half way between *τ Arietis* and the *Pleiades*.

From the 28th February to the 7th March I did not notice any marked shifting in the position of the axis, as will be seen by the pretty uniform boundaries given above.

The position of Morges approximately is

46° 30′ 0″ N. Latitude
6 31 0 E. } of Greenwich in Longitude
or $0^h\ 26^m\ 2^s$ fast } (Mean Time).

Maison Décoppet, Morges, Canton de Vaud,
Switzerland, 4 *Nov.* 1872.

Note on the Binary Star α Geminorum. By Mr. Hind.

Several communications have been recently made to the Society, with reference to the motion of this double star, but the elaborate determination of the orbit by M. Thiele, of Copenhagen,

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appears to have been altogether overlooked. It is published in No. 1227 of the *Astronomische Nachrichten*, and shows that there is no necessity to make the very improbable assumption of hyperbolic motion, in order to represent the whole series of observations from the year 1719 downwards, within their supposed limits of error. I transcribe M. Thiele's elements:—

Peri-astron Passage 1750·326

Peri-astron from Node or Orbit	294° 0'·8	Merid. of 1850
Node	31 58 ·	
Inclination	42 5·4	
Excentricity	0·34382	
Mean Annual Motion ..	−21'·6685	
Semi-axis Major	7″·5375	
Period of Revolution ..	996·85	

Elements of the Orbit of ξ Ursæ Majoris. By Mr. Hind.

The following elements represent very fairly—better, indeed, than any I have yet seen—the measures of this star from 1781 to 1872, including those lately given by Mr. Knott, upon which I have much relied:—

Peri-astron Passage 1875·687
Period 60·679 years.

Peri-astron on Orbit	333° 33'	1872
Node	100 42	
Inclination ..	56 20	
Excentricity ..	0·38302	
Semi-axis Major	2″·587	

Hence the following angles and distances:—

	°	″		°	″
1872·0	32·97	1·034	1874·5	337·91	1·004
72·5	22·85	0·974	75·0	328·44	1·073
73·0	11·69	0·940	75·5	320·22	1·154
73·5	0·01	0·933	76·0	313·13	1·243
74·0	348·55	0·955			

The elements of this binary will no doubt be much improved by careful measures during the next few years.

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